MEMORANDUM

TO: Modeling Task Force Members

FROM: Mike Ainsworth

SUBJECT: Modeling Task Force Meeting Summary

MODELING TASK FORCE MEETING

November 17, 2004 - Wednesday
9:30 A.M. - 11:30 A.M.

Southern California
Association of Governments
818 W. 7th Street, 12th Floor
Los Angeles, CA 90017
Room – Riverside A

Attendees

Luke Cheng	Ron Taira
Mike Ainsworth	Deng Bang Lee
Kathy Hsiao	Dale Iwai
Rena Lum	William McKenna
Ed Humenik	Arnie Sherwood
Mina Lee	Dale Iwai
R. Mike Labudzki	Steve Nieman
Bill Davidson	Steve Smith
Keith Killough	Timor Rafiq
David Kennedy	Brad Williams
Howard Slavin	Viviane Doche-Boulos
Tim Byrne	Marlie Whiteman
Chris Devlin	Stewart Chesler
Chaushie Chu	Maren Outwater
Hong Kim	Guoxiong Huang
Paul Burke	Jim Lam
Andres Rabinowicz	Mike Florin
Shuguang He	Tomas Carranza
Srini Bhat	Robert Farley
Henning Eichler	Jonathan Osborn
Pedro Ayala	

DRAFT MEETING SUMMARY

1.0 Call to Order

2.0 Public Comment Period – No Comments

3.0 Introductions

4.0 Consent Calender - Review and Approve Previous Meeting Summary –Approved

5.0 Information Items:

5.1 Truck/Freight Modeling Framework and Preparation Study – Robert Calix (MTA) and Luke Cheng (MTA) presented MTA's recently completed Truck/Freight Modeling Framework and Preparation Study. Project objectives included: 1) providing transportation planners with knowledge and understanding of domestic truck/freight movements, 2) developing a model framework for modeling domestic truck/freight movements, and 3) recommending an approach for constructing a domestic truck/freight movement model. The presentation provided background on freight movements and trucking, the warehousing/distribution industry, and service vs. freight trucking. Possible state-of-the-practice modeling approaches include: 1) link-based factoring, 2) Origin-Destination factoring, 3) 3-step freight truck models, 4) 4-step commodity models, 5) economic activity models, and 6) hybrid (commodity and truck both) models. State-of-the-art modeling approaches include logistics chain models and tour-based models. The Hybrid Model approach recommended by the Consultant combines a 1) logistics chain model for agriculture products, petroleum and coal, forestry, mining and 2) a tour-based model for textile, apparel, electronics and appliance, furniture, and services. This unique combination of modeling techniques will best capture truck/freight movements within Southern California.

5.2 Transcad Model Conversion - Howard Slavin, Caliper Corporation, discussed the status and presented the results of the conversion of the Regional Model to Transcad. The conversion of SCAG's Model to Transcad has been completed and the model has been delivered to SCAG. In addition, comparisons to SCAG's existing model's results have been produced. The Mode Choice program will remain in Fortran and the Trip Generation program will be converted to Transcad's programming language. Howard Slavin explained the user-friendly model interface. Software improvements include floating point arithmetic, improved feedback, advanced graphics, and reduced run times. In addition, Caliper has manually conflated the highway network to aerial photography to produce a geographically correct network. Hausha Liu (SCAG) provided a description of SCAG's future software plans. There are internal and external pressures to upgrade the modeling software. SCAG has met with the Commissions to discuss the conversion strategy. SCAG will initiate a process to evaluate the three most utilized softwares (Transcad, Cube, EMME2). Early next year SCAG will come back to the group with an update of the selection process.

5.3 Port of Long Beach's Freight Data Gathering Project - Kerry Cartwright, Port of Long Beach, provided a description of their freight data inventory project and model improvement project. Three years ago the Port hired MMA to develop a focused model based on SCAG's RTP Model. The Port is currently updating the trip generation component of the Model. The Port is also

conducting surveys at the Port's gates to update the Trip Generation program. The Port plans to perform a major model update this year. The Port is conducting a toll study on the three bridges serving the Port. Survey information from MTA's inter-modal survey will also be used in the update. The updated model results will be provided to SCAG for use in the next Regional Transportation Plan (RTP07).

5.4 Regional Model Improvement Program - Maren Outwater, Cambridge Systematics, provided the status of the Regional Model Improvement Program. Cambridge has completed the trip generation model, the vehicle availability model, and the external trip model. The current focus is to complete the mode choice model. Cambridge is currently testing alternative nesting structures.

5.5 Inter-Regional Rail Project - Timor Rafiq, Rafiq and Associates, provided an overview of the Inter-Regional Rail Project. The goal of the project is to develop a modeling methodology to forecast passenger rail patronage between San Diego County and the SCAG Region. The project objectives include: 1) developing a cost-efficient methodology for inclusion of the San Diego area in SCAG's transportation modeling efforts, 2) providing better information on inter-regional travel trips, 3) developing a baseline for forecasting inter-regional rail trips. Rafiq will focus on developing the Socio-economic data inputs, data processing and analysis, and developing the model inputs. The deliverables include: 1) a compilation of existing socioeconomic and rail travel data, 2) development of highway and transit network for the expanded area, 3) development of socioeconomic and travel model inputs for the expanded modeling area, 4) and the preparation of a Draft Project Report. The model input data is scheduled for delivery in February 2005 and the Draft Report is due in June 2005.

5.6 MAGLEV Forecast - Deng Bang Lee, SCAG, presented the modeling methodology used to forecast MAGLEV passenger demand. Ridership demand includes peak period commuters (SCAG Model), airport passenger trips (RADAM Model), passenger demand from special events, and induced/catalytic demand. Major changes to the Regional Model include additional "Smart Shuttle" service and the addition of a Mode Choice nesting. Stated preference data from the Metrolink and employee surveys was used to develop two ALOGIT model estimation data sets.

5.7 City of Los Angeles Model Conversion - Mike Florin, INRO Consultants, presented the conversion of the Regional Model to EMME2 for the City of Los Angeles model development project. The presentation addressed the following model development tasks: 1) overview of the EMME/2 version of the RTP Model, 2) results obtained for Year 2000 Model and a comparison with the SCAG TRANPLAN results, 3) results obtained for the Year 2030 Model and a comparison with the SCAG TRANPLAN results, 4) comparison of the Year 2000 and 2030 scenarios, 5) and a description of the LADOT sub-area. Mike Florin concluded that the Regional Transportation Model used by SCAG has been successfully and entirely converted from TRANPLAN to EMME/2. The conversion results are consistent with the TRANPLAN model (within 1% in most cases). Many desirable features are provided in the EMME/2 version including 1) integrated transit and auto network; 2) new graphic display and analysis tools, 3) Park-n-Ride analysis, 4) flow analysis tools, 5) sub-area modeling capability, and 6) floating point number computation which provides more stable results.

6.0 Open Discussion and Other Business – None

7.0 Schedule and Agenda for Next Meeting – The next meeting is scheduled for January 26, 2005.

8.0 Adjournment